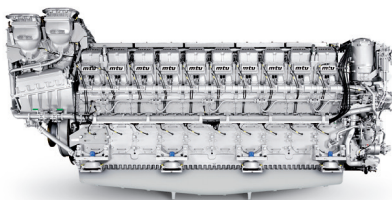




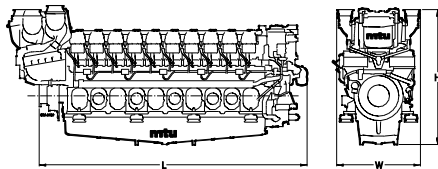
## Marine

# DIESEL ENGINES 20V 8000 M71/71L

for fast vessels with high load factors (1B)



Engine	Dimensions (L x W x H) mm (in)	Mass, dry kg (lbs)
M71/M71L	6645 x 2040 x 3375 (261.6 x 80.3 x 132.9)	45300 (98870)
		Mass, wet kg (lbs)
		47665 (105080)



Typical applications: Ferries, large displacement yachts, OPVs, naval auxiliary vessels

Optional equipment and finishing shown. Standard may vary.

Engine type		20V 8000 M71	20V 8000 M71L
Rated power ICXN	kW	8200	9100
	(bhp)	(10995)	(12205)
Speed	rpm	1500	1500
No. of cylinders		20	20
Bore/stroke	mm (in)	265/315 (10.4/12.4)	265/315 (10.4/12.4)
Displacement, total	l (cu in)	347.4 (21200)	347.4 (21200)
Flywheel housing		EPA 2	EPA 2
Exhaust optimization <sup>1)</sup>		IMO II	IMO II

<sup>1)</sup> IMO - International Maritime Organisation (Marpol-convention)  
EPA - US Marine Directive 40 CFR 94

Fuel consumption <sup>1)</sup>		20V 8000 M71	20V 8000 M71L
at rated power	g/kWh	190	189
	bhp	1877	2072
	gal/hr	496	548

1) Tolerance +5% per ISO 3046, Diesel fuel to DIN EN 590 with a min L.H.V. of 42800 kJ/kg (18390 BTU/lb)

Standard equipment	
Starting system	Air starter motor, 15 bar; press. reduct. station 40/15 bar, coolant preheating system
Oil system	Lube oil pump, automatic filter with backflushing, centrifugal oil filter, lube-oil heat exchanger, lube oil priming pump, lube oil level monitoring/replenishment system, switchboxes for lube oil replenishment and priming pumps
Fuel system	Fuel delivery pump, fuel duplex filter with diverter valve, "common rail" fuel injection system with high-pressure pump, pressure accumulator and electronically fuel injection with cylinder cutout system, jacketed HP fuel lines, leak-off fuel tank level monitored, fuel hand pump, fuel pre-filter with water separator, fuel re cooler
Cooling system	MTU-split-circuit coolant system, coolant-to-raw water plate core heat exchanger, centrifugal raw water pump with priming system, coolant circulation pump, coolant expansion tank
Combustion air system	Engine coolant temperature-controlled intercooler, sequential turbocharging with 4 water-cooled turbochargers, on-engine set of seawater-resistant combustion-air filters
Exhaust system	Triple-walled, liquid-cooled, on-engine exhaust manifolds, exhaust bellows (horizontal discharge)
Mounting system	Resilient mounts
Power transmission	Torsional and offset compensating couplings
Engine management system	Engine control and monitoring system (MDEC), interface to remote control and monitoring system, local operating panel (LOP)
Interfaces	Flexible joints (hose lines, rubber bellows)

Optional equipment	
Starting system	Compressed air tanks
Monitoring/control system	Monitoring and control system MCS-5, remote control system RCS-5
Gearbox options	Various gearbox models
Classification	ABS, BV, CR, DNV, GL, KR, LR, NK, RINA incl. necessary extensions to scope of supply

Reference conditions:

- > Power definition according ISO 3046
- > Intake air temperature 25°C/Sea water temperature 25°C
- > Intake air depression 15 mbar/Exhaust back pressure 30 mbar
- > Barometric pressure 1000 mbar
- > Power reduction at 45°C/32°C: none

Specifications are subject to change without notice.  
All dimensions are approximate, for complete information refer to installations drawing. For further information consult your MTU distributor/dealer.